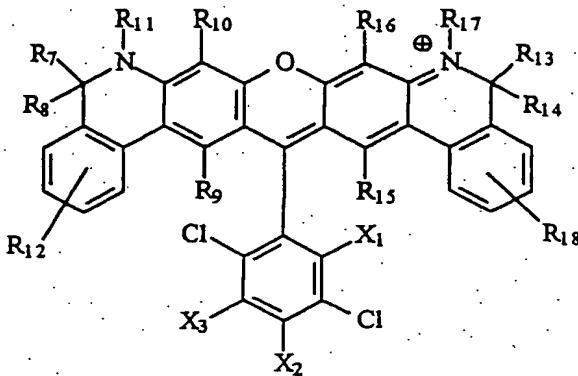
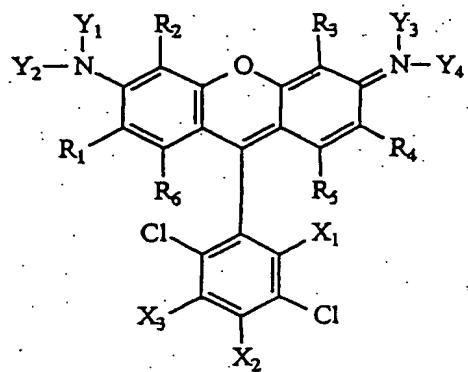


## ABSTRACT

A set of 4,7-dichlororhodamine compounds useful as fluorescent dyes are  
5 disclosed having the structures



wherein R<sub>1</sub>-R<sub>6</sub> are hydrogen, fluorine, chlorine, lower alkyl, lower alkene, lower alkyne, sulfonate, sulfone, amino, amido, nitrile, lower alkoxy, linking group, or, when taken together, R<sub>1</sub> and R<sub>6</sub> is benzo, or, when taken together, R<sub>4</sub> and R<sub>5</sub> is benzo;  
10 R<sub>7</sub>-R<sub>10</sub>, R<sub>12</sub>-R<sub>16</sub> and R<sub>18</sub> may be hydrogen, fluorine, chlorine, lower alkyl, lower alkene, lower alkyne, sulfonate, sulfone, amino, amido, nitrile, lower alkoxy, linking group; R<sub>11</sub> and R<sub>17</sub> may be hydrogen, lower alkyl, lower alkene, lower alkyne, phenyl, aryl, linking group; Y<sub>1</sub>-Y<sub>4</sub> are hydrogen, lower alkyl, or cycloalkyl, or, when taken together, Y<sub>1</sub> and R<sub>2</sub>, Y<sub>2</sub> and R<sub>1</sub>, Y<sub>3</sub> and R<sub>3</sub>, and/or Y<sub>4</sub> and R<sub>4</sub> is propano, ethano,  
15 or substituted forms thereof; and X<sub>1</sub>-X<sub>3</sub> taken separately are hydrogen, chlorine, fluorine, lower alkyl, carboxylate, sulfonate, hydroxymethyl, and linking group, or any combinations thereof. In another aspect, the invention includes reagents labeled with the 4,7-dichlororhodamine dye compounds, including deoxynucleotides, dideoxynucleotides, and polynucleotides. In an additional aspect, the invention includes methods utilizing such dye compounds and reagents including dideoxy  
20 polynucleotide sequencing and fragment analysis methods.